

ABSTRACT

A sleeve 10 for introduction of a pressurized fluid, which is attached to a rockbolt main body 1, comprises a cylindrical projecting part 11 of a large diameter and a bearing-plate-holding part 12 of a diameter smaller than an aperture of a bearing plate 6. The projecting part 11 and the bearing-plate-holding part 12 preferably has the same inner diameter. When the rockbolt main body 1 is embedded in a bedrock or ground, the bearing plate 6 locates on an edge of a rockbolt-setting hole of the bedrock or ground, and the bearing-plate-holding part 12 extends through the bearing plate 6 into the rockbolt-setting hole. Since the projecting part 11 and the bearing plate 6 are disposed on a sprayed concrete layer, a projection height of the rockbolt is remarkably decreased. Consequently, lining concrete 8 is applied onto the sprayed concrete layer with ease, and the bedrock or ground is reinforced with high reliability.